

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Stefan Disch et al.

Application No.: 10/069,087

Confirmation No.: 9098

Filed: May 29, 2002

Art Unit: 1711

For: LOW-EMISSION COLORED  
POLYOXYMETHYLENE MOLDING  
COMPOSITION

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Examiner: N. M. Nutter

**APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on December 15, 2006, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

1 This brief contains items under the following headings as required by 37 C.F.R. § 41.37  
2 and M.P.E.P. § 1206:

- 3 I. Real Party In Interest
- 4 II. Related Appeals and Interferences
- 5 III. Status of Claims
- 6 IV. Status of Amendments
- 7 V. Summary of Claimed Subject Matter
- 8 VI. Grounds of Rejection to be Reviewed on Appeal
- 9 VII. Argument
- 10 VIII. Claims
- 11 Appendix A Claims
- 12 Appendix B Evidence
- 13 Appendix C Related Proceedings

14 **I. REAL PARTY IN INTEREST**

15 The real party in interest for this appeal is:

16 TICONA GmbH. See reel # 013607 and frame # 0038.

17 **II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS**

18 There are no other appeals, interferences, or judicial proceedings which will directly  
19 affect or be directly affected by or have a bearing on the Board's decision in this appeal.

20 **III. STATUS OF CLAIMS**

21 A. Total Number of Claims in Application

22 There are 17 claims pending in application.

B. Current Status of Claims

1. Claims canceled: 4-10, 13, and 20

2. Claims withdrawn from consideration but not canceled: none

3. Claims pending: 1-3, 11, 12, 14-19, and 21-26

4. Claims allowed: none

5. Claims rejected: 1-3, 11, 12, 14-19, and 21-26

C. Claims On Appeal

The claims on appeal are claims 1-3, 11, 12, 14-19, and 21-26

**IV. STATUS OF AMENDMENTS**

Applicant filed A Request for Reconsideration and a terminal disclaimer on November 7, 2006.<sup>1</sup> The Examiner responded to the Request for Reconsideration in an Advisory Action mailed November 21, 2006. None of the claims were amended after final, accordingly, the claims enclosed herein as Appendix A are the claims filed prior to the final office action being issued. However, the claims in Appendix A do incorporate the amendments indicated in the paper filed by Applicant on May 30, 2006.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The application has three independent claims 1, 15 and 25. The applicant is also arguing separate patentability for dependent claims 3, 16-19, 21-24 and 26. Claims 1, 3, 15-19 and 21-26 along with the support are as follows:

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<sup>1</sup> It is noted that the applicant entitled the Request for Reconsideration as an Amendment After Final Rejection but there were no amendments submitted with the response.

- 1 1. A colored molding composition made from polyacetal copolymer, wherein the polyacetal  
2 copolymer consisting essentially of oxymethylene units and oxyethylene units, and strong  
3 protonic acid and/or a derivative of a strong protonic acid was used as initiator during  
4 preparation of the polyacetal copolymer, and a colorant, and the emission of  
5 formaldehyde from the colored molding composition is lower than from a molding  
6 composition for which the polyacetal copolymer was prepared using a Lewis acid as  
7 initiator **[see the specification at page 3, lines 31-37]**; and wherein the formaldehyde  
8 emission, determined on test specimens in accordance with the German Automotive  
9 Industry Recommendation No. 275 (VDA 275), is not more than 20 mg/kg. **[see the**  
10 **specification at page 4, lines 8 and 9 and page 5, lines 35-37]**
- 11 3. The molding composition as claimed in claim 2, wherein the colorants carry a coating of  
12 an alkali metal salt of a fatty acid having at least 12 carbon atoms. **[see the specification**  
13 **at page 6, lines 10-13]**
- 14 15. A process to prepare a molding composition which comprises preparing a polyacetal  
15 copolymer which consisting essentially of oxymethylene units and oxyethylene units,  
16 using trifluoromethanesulfonic acid and/or a derivative of trifluoromethanesulfonic acid  
17 as an initiator **[see the example on page 7]**, mixing the polyacetal copolymer with at  
18 least one colorant selected from the group consisting of white pigments, black pigments  
19 and color pigments, **[see the specification at page 4, lines 3 and 4]** and obtaining a  
20 colored polyacetal molding composition whose emission of formaldehyde is lower than  
21 from a molding composition for which the polyacetal copolymer was prepared using a  
22 Lewis acid as an initiator **[see the specification at page 4, lines 11-15]** and wherein the

1 formaldehyde emission, determined on test specimens in accordance with the German  
2 Automotive Industry Recommendation No. 275 (VDA 275), is not more than 20 mg/kg.  
3 **[see the specification at page 4, lines 8 and 9 and page 5, lines 35-37].**

4 16. The process as claimed in claim 15, wherein said colorant is in an amount from 0.1 to  
5 3.0% by weight. **[see the specification at page 4, lines 3 and 4 and page 5, lines 13-16]**

6 17. The process as claimed in claim 16, wherein the colorant carries a coating of an alkali  
7 metal salt of a fatty acid having at least 12 carbon atoms. **[see the specification at page**  
8 **6, lines 10-13]**

9 18. The process as claimed in claim 15, wherein the polyacetal copolymer comprises from  
10 0.1 to 10 mol% of oxyethylene units. **[see the specification at page 4, lines 19-21]**

11 19. The process as claimed in claim 15, wherein the formaldehyde emission, determined on  
12 test specimens in accordance with the German Automotive Industry Recommendation  
13 No. 275 (VDA 275), is not more than 60% of the formaldehyde emission of a colored  
14 molding composition for which the polyacetal copolymer was prepared using BF<sub>3</sub> as  
15 initiator. **[see the original claim 5]**

16 21. The process as claimed in claim 15, which further comprises from 0.1 to 10% by weight  
17 of stabilizers and auxiliaries. **[see the specification at page 5, lines 13-18]**

18 22. The process as claimed in claim 16, wherein the polyacetal copolymer comprises from  
19 1.0 to 2.5 mol% of oxyethylene units. **[see the specification at page 4, lines 16-21]**

- 1    23.    The process as claimed in claim 15, wherein the formaldehyde emission, determined on  
2           test specimens in accordance with the German Automotive Industry Recommendation  
3           No. 275 (VDA 275), is not more than 50% of the formaldehyde emission of a colored  
4           molding composition for which the polyacetal copolymer was prepared using  $\text{BF}_3$  as the  
5           initiator. **[see the original claim 5]**
- 6    24.    The process as claimed in claim 16, wherein the formaldehyde emission, determined on  
7           test specimens in accordance with the German Automotive Industry Recommendation  
8           No. 275 (VDA 275), is less than 10 mg/kg. **[see the specification at page 4, lines 1-9**  
9           **and in particular line 9]**
- 10   25.    A process for reducing the formaldehyde emission of colored molding compositions  
11           made from polyacetal copolymer, which comprises preparing a polyacetal copolymer  
12           consisting essentially of oxymethylene units and oxyethylene units, **[see the**  
13           **specification at page 4, lines 1-9 and original claim 8]** using trifluoromethanesulfonic  
14           acid and/or a derivative of trifluoromethanesulfonic acid as an initiator, **[see the example**  
15           **on page 7]** mixing the polyacetal copolymer with at least one colorant selected from the  
16           group consisting of white pigments, black pigments and color pigments, **[see the**  
17           **specification at page 4, lines 3 and 4]** and obtaining a colored polyacetal molding  
18           composition whose emission of formaldehyde is lower than from a molding composition  
19           for which the polyacetal copolymer was prepared using a Lewis acid as initiator. **[see the**  
20           **specification at page 4, lines 11-15]**
- 21   26.    The process as claimed in claim 25, wherein when the initiator is added in a solvent. **[see**  
22           **the original claim 9]**

1   **VI.   GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

2           The only outstanding rejection remaining in the application is the following:

3           Claims 1-3, 11, 12, 14-19 and 21-26 are rejected under 35 U.S.C. 103(a) as being  
4   unpatentable over Auerbach, U.S. Patent No. 4,666,995 ("Auerbach") taken with Paul, U.S.  
5   Patent No. 4,727,106 ("Paul") in view of Chapman, U.S. Patent No. 3,656,982 ("Chapman") all  
6   in view of Mück U.S. Patent No. 5,994,455 ("Mück").

7   **VII.   ARGUMENT**

8   Claims 1-3, 11, 12, 14-19 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable  
9   over Auerbach taken with Paul in view of Chapman, all in view of Mück.

10       **A.               Claims 1, 2, 11, 12 and 14**

11  
12           Although, the use of POM as a carrier material for pigments is known, the existing  
13   shortcoming of chemical instability and subsequent formaldehyde evolution during processing  
14   and from molding has not been satisfactorily eliminated while at the same time retaining the  
15   required property profile.

16           The object of the applicant's claimed invention was to develop colored POM molding  
17   compositions which contain a colorant and in which **the formaldehyde emission observed**  
18   **hitherto has been substantially reduced**, in fact, **the formaldehyde emission, determined on**  
19   **test specimens in accordance with the German Automotive Industry Recommendation No. 275**  
20   **(VDA 275), is not more than 20 mg/kg**, without impairing the known advantageous properties  
21   of POM. (see the specification at page 3, lines 22-25). The prior art references the Examiner has  
22   applied against the claimed invention did not recognize nor solve this problem.

1           The Examiner has stated that Auerbach teaches the use of a colorant. As the Examiner  
2 correctly cited Auerbach at the paragraph bridging col. 8 and 9 which states,

3           It is within the ambit of the present invention that the oxymethylene  
4 polymer molding composition also include, if desired,

- 5           1) plasticizers,
- 6           2) other formaldehyde scavengers,
- 7           3) mold lubricants,
- 8           4) antioxidants,
- 9           5) fillers,
- 10          6) colorants,
- 11          7) reinforcing agents,
- 12          8) light stabilizers,
- 13          9) pigments,
- 14          10) other stabilizers,
- 15          11) and the like, so long as such additives do not materially affect the  
16             desired properties of the resulting molding composition and the  
17             articles molded therefrom. The additional additives can be admixed at  
18             any convenient stage in the molding composition preparation, but  
19             usually are added when the oxymethylene polymer is being blended or  
20             admixed with the polyamide-carrier resin dispersion.<sup>2</sup>

21  
22          It is noted that there are 11 optional ingredients cited by Auerbach. Auerbach gives no  
23 motivation to particularly select any of the optional ingredients (colorant).

24          As the Examiner pointed out, Paul discloses at col. 11, lines 3-21,

25          The stabilized oxymethylene polymer compositions also include if  
26          desired,

- 27          1) plasticizers,
- 28          2) pigments,
- 29          3) lubricants and
- 30          4) other stabilizers, e.g.,
- 31          5) stabilizers against degradation by ultraviolet light,
- 32          6) e.g., 2,2'-dihydroxy-4,4'-dimethoxy -benzophenone;
- 33          7) 2-hydroxy-4-methoxy-benzophenone;
- 34          8) 2-hydroxy-4-methoxyl-chlorobenzophenone,
- 35          9) nucleants,
- 36          10) UV screens and
- 37          11) absorbers,
- 38          12) metal soaps,

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<sup>2</sup> The numbers have been inserted by the applicant.



13) reinforcing and  
14) filler such as  
15) glass,  
16) talc,  
17) white mica and  
18) gold mica,  
19) polymeric substances such as  
20) ethylene vinyl acetate,  
21) polyurethanes,  
22) impact modifiers, and  
23) color pigments which are compatible with oxymethylene polymers,  
e.g.,  
24) red pigments such as  
25) azo dye and  
26) cadmium sulfide-cadmium selenide reds and  
27) "Mercadium" reds,  
28) blue pigments such as  
29) phthalocyanine blues,  
30) green pigments such as  
31) chromium oxide greens,  
32) white pigments such as  
33) titanium dioxide whites, and  
34) black pigments such as  
35) carbon blacks which can be incorporated in amounts of up to about  
5% by weight, based upon the total weight of the composition.<sup>3</sup>

It is noted that there are 35 optional ingredients cited by Paul. Paul gives no motivation to particularly select any of the optional ingredients.

Paul further discloses at col. 3, lines 28-36,

The term oxymethylene polymer as used herein is intended to include any oxymethylene polymer having --CH<sub>2</sub> O-- groups comprising **at least about 50 percent of the recurring units**, for example, homopolymer, copolymers, terpolymers and the like.

Chapman describes only some pearlescent pigments for **cosmetically usage** (e.g. abstract). Under the heading of Description Of the Preferred Embodiments, Chapman states:

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<sup>3</sup> The numbers have been inserted by the applicant.

1           “The present invention is particularly useful and beneficial in conjunction with  
2           pearlescent pigments which are to be incorporated in compressed cosmetic  
3           powders.” (emphasis added)

4           There are no compositions described in Chapman which encompasses  
5           oxymethylene/oxyethylene copolymers. In addition, there is no indication given which kind of  
6           oxymethylene/oxyethylene copolymers has to be used for the reduction of the formaldehyde  
7           emission raised through the mixture of said copolymer with a colorant (pigment). The applicant  
8           does not believe that Chapman is related to the applicant’s claimed invention or for that matter is  
9           combinable with the other references applied against the claims. Chapman is in a non-analogous  
10          art (cosmetic powders).

11          The Examiner states at the second full paragraph of page 6 of the Office Action that he  
12          relies upon Mück solely to show the trifluoromethanesulfonic acid initiator.

13          However, none of the applied references disclose that the formaldehyde emission,  
14          determined on test specimens in accordance with the German Automotive Industry  
15          Recommendation No. 275 (VDA 275), is not more than 20 mg/kg (see independent claim 1).

16          The Examiner argues at the bottom of page 6 of the Final Office Action mailed July 17,  
17          2006, that the low level of formaldehyde emission is inherent. However, the applicant  
18          respectfully disagrees. In a second step, a colorant is added to these polyoxymethylenes to form  
19          a colored composition with a low formaldehyde emission level. However, it is important to  
20          understand that the addition of a colorant usually leads to an increased destruction of the  
21          polyoxymethylene and following to an increased emission of formaldehyde. In the state of the art,  
22          the increased formaldehyde emission is reduced by addition of N-containing compounds. In view  
23          of the present invention it was unexpectedly found that such an increase of emitted formaldehyde

1 occurred by adding a colorant can be avoided respectively reduced if the specific prepared  
2 polyoxymethylenes are used. So the argument of the Examiner is to simply state that only a  
3 polyoxymethylene with a low emission level of formaldehyde is used to prepare a colored  
4 polyoxymethylene composition which shows also a low formaldehyde emission. In contrast  
5 thereto it was not obvious that the colored, specific prepared polyoxymethylenes shows a  
6 reasonable lower increase of formaldehyde emission compared with other polyoxymethylenes  
7 prepared with other methods after coloration.

8         The oxymethylene/oxyethylene copolymers can be prepared with several alternative  
9 initiators (e.g. with Lewis acids, see Mück column 1, lines 35-39). There is no evidence in Mück  
10 that copolymers containing oxymethylene and oxyethylene units and a colorant (pigment) leads  
11 to an increased formaldehyde emission and that this emission can be reduced by mixing specific  
12 prepared copolymers (with a strong protonic acid) with the colorant (pigment). For example, the  
13 preparation of the copolymers with Lewis acids (described in Mück) leads to a higher  
14 formaldehyde emission (see e.g., the present application, in particular the comparative examples,  
15 wherein the copolymer is prepared with  $\text{BF}_3$  (page 8 line 1, results page 10 table 1)).

16         In the state of the art the use of N-containing stabilizers are known to increase e.g. light  
17 or melt stability (e.g. EP 448037, Kosinski (previously applied by the Examiner against the  
18 claims), see page 6, lines 4-19 of Kosinski). Surprisingly, oxymethylene-oxyethylene  
19 copolymers prepared with a specific method (with strong protonic acids as initiator) leads to a  
20 low formaldehyde emission level if a colorant is added. There is **NO** indication in Auerbach,  
21 Paul, Mück, nor Chapman that this specific combination (oxymethylene-oxyethylene copolymers  
22 in accordance with claim 1 and a colorant) to get colored copolymers results in a low emission  
23 level of formaldehyde, in particular, formaldehyde emission, determined on test specimens in

1 accordance with the German Automotive Industry Recommendation No. 275 (VDA 275), is not  
2 more than 20 mg/kg.

3 Further a person of ordinary skill in the art couldn't find any evidence in to prepare  
4 copolymers containing oxymethylene and oxyethylene units mixed with a colorant (pigment),  
5 wherein the copolymer is prepared with a strong protonic acid to reduce the formaldehyde  
6 emission of the resulting colored copolymer compound.

7 In summary, there are 11 optional ingredients cited by Auerbach. Auerbach gives no  
8 motivation to particularly select the colorant amongst the optional ingredients. There are 35  
9 optional ingredients cited by Paul. Paul gives no motivation to particularly select any of the  
10 optional ingredients. Chapman is related to a totally different field of invention that the applicant  
11 does not believe one of ordinary skill in the POM art would even look at Chapman. Again,  
12 Chapman describes only some pearlescent pigments for cosmetically usage. Mück does not  
13 disclose that the formaldehyde emission, determined on test specimens in accordance with the  
14 German Automotive Industry Recommendation No. 275 (VDA 275), is not more than 20 mg/kg.

15 The Examiner must consider the references as a whole, In re Yates, 211 USPQ 1149  
16 (CCPA 1981). The Examiner cannot selectively pick and choose from the disclosed multitude of  
17 parameters without any direction as to the particular one selection of the reference without  
18 proper motivation. The mere fact that the prior art may be modified to reflect features of the  
19 claimed invention does not make modification, and hence claimed invention, obvious **unless the**  
20 **prior art suggested the desirability of such modification** (In re Gordon, 733 F.2d 900, 902,  
21 221 USPQ 1125, 1127 (Fed. Cir. 1984); In re Baird, 29 USPQ 2d 1550 (CAFC 1994) and In re  
22 Fritch, 23 USPQ 2nd. 1780 (Fed. Cir. 1992)). In re Gorman, 933 F.2d 982, 987, 18 USPQ2d  
23 1885, 1888 (Fed. Cir. 1991) (in a determination under 35 U.S.C. § 103 it is impermissible to

1 simply engage in a hindsight reconstruction of the claimed invention; the references themselves  
2 must provide some teaching whereby the applicant's combination would have been obvious); In  
3 re Dow Chemical Co., 837 F.2d 469,473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) (under 35  
4 U.S.C. § 103, both the suggestion and the expectation of success must be founded in the prior art,  
5 not in the applicant's disclosure). The applicants disagree with the Examiner why one skilled in  
6 the art with the knowledge of the references would selectively modify the references in order to  
7 arrive at the applicants' claimed invention. The Examiner's argument is clearly based on  
8 hindsight reconstruction.

9 Obviousness cannot be established by combining the teachings of the prior art to produce  
10 the claimed invention absent some teaching, suggestion, or incentive supporting this  
11 combination, although it may have been obvious to try various combinations of teachings of the  
12 prior art references to achieve the applicant's claimed invention, such evidence does not establish  
13 prima facie case of obviousness (In re Geiger, 2 USPQ 2d. 1276 (Fed. Cir. 1987)). There would  
14 be no reason for one skilled in the art to Auerbach taken with Paul in view of Chapman and  
15 Mück. For the above reasons, this rejection should be withdrawn.

16 **B. Claim 3**

17 Claim 3 further limits claim 2 and further requires that the colorants carry a coating of an  
18 alkali metal salt of a fatty acid having at least 12 carbon atoms. The Examiner is correct that  
19 Chapman shows this feature, but as stated above, the applicant does not believe that one of  
20 ordinary skill in the colored molding composition made from polyacetal copolymer art would  
21 rely upon Chapman as an applicable reference. Again, Chapman is related to a totally different  
22 field of invention (cosmetic). The applicant does not believe one of ordinary skill in the POM art

1 would even look at Chapman. Chapman describes only some pearlescent pigments for cosmetic  
2 usage. The other references the Examiner relies upon do not show this claimed feature.

3  
4 **C. Claims 15, 16, 18, 19 and 21- 23**

5 In addition to the arguments presented for claim 1 above, Claim 15 is narrower than  
6 claim 1, with respect to the following features:

7 (1) the initiator is very specific, trifluoromethanesulfonic acid and/or a derivative of  
8 trifluoromethanesulfonic acid,

9 (2) the colorant is specific and is selected from the group consisting of white  
10 pigments, black pigments and color pigments.

11 Again, as stated above, Mück does mention colorants. The Examiner states at the second  
12 full paragraph of page 6 of the Final Office Action that he relies upon Mück solely to show the  
13 trifluoromethanesulfonic acid initiator. The Examiner has relied upon Paul for the disclosure of  
14 the specific colorants which are selected from the group consisting of white pigments, black  
15 pigments and color pigments.

16 Again, the Examiner must consider the references as a whole, In re Yates, supra. The  
17 Examiner cannot selectively pick and choose from the disclosed multitude of parameters without  
18 any direction as to the particular one selection of the reference without proper motivation.

19 The mere fact that the prior art may be modified to reflect features of the claimed invention does  
20 not make modification, and hence claimed invention, obvious **unless the prior art suggested**  
21 **the desirability of such modification** (In re Gordon, supra); In re Baird, supra and In re Fritch,  
22 supra). In re Gorman, supra) (in a determination under 35 U.S.C. § 103 it is impermissible to  
23 simply engage in a hindsight reconstruction of the claimed invention; the references themselves

1 must provide some teaching whereby the applicant's combination would have been obvious); In  
2 re Dow Chemical Co., supra) (under 35 U.S.C. § 103, both the suggestion and the expectation of  
3 success must be founded in the prior art, not in the applicant's disclosure). The applicants  
4 disagree with the Examiner why one skilled in the art with the knowledge of the references  
5 would selectively modify the references in order to arrive at the applicants' claimed invention.  
6 The Examiner's argument is clearly based on hindsight reconstruction.

7 Obviousness cannot be established by combining the teachings of the prior art to produce  
8 the claimed invention absent some teaching, suggestion, or incentive supporting this  
9 combination, although it may have been obvious to try various combinations of teachings of the  
10 prior art references to achieve the applicant's claimed invention, such evidence does not establish  
11 prima facie case of obviousness (In re Geiger, supra). There would be no reason for one skilled  
12 in the art to Auerbach taken with Paul in view of Chapman and Mück.

13 Claims 16, 18, 19 and 21- 24 ultimately depend upon claim 15 and would be patentable  
14 for at least the same reasons claim 15 is patentable.  
15

16 **D. Claim 17**

17 Claim 17 further limits claim 16 and further requires that the colorants carry a coating of  
18 an alkali metal salt of a fatty acid having at least 12 carbon atoms. The Examiner is correct that  
19 Chapman shows this feature, but as stated above, the applicant does not believe that one of  
20 ordinary skill in the colored molding composition made from polyacetal copolymer art would not  
21 rely upon Chapman as an applicable reference. As stated above, Chapman is related to a  
22 different art (cosmetic usage) and is not combinable with the other references. The other  
23 references the Examiner do not teach this limitation.

1       **E. Claim 24**

2           Claim 24 further limits claim 16, which further limits claim 15 as discussed above. In  
3 addition claim 24 further requires the formaldehyde emission, determined on test specimens in  
4 accordance with the German Automotive Industry Recommendation No. 275 (VDA 275), is less  
5 than 10 mg/kg. As stated above, none of the references teach a formaldehyde emission less than  
6 20 mg/kg as is required in claims 1 and 15, let alone a formaldehyde emission less than 10 mg/kg  
7 as is required in claim 24. The Examiner has just asserted that this limitation is inherent in the  
8 prior art. The applicant respectfully disagrees.

9  
10       **F. Claims 25 and 26**

11           Claim 25 is a process claim directed for reducing the formaldehyde emission of colored  
12 molding compositions made from polyacetal copolymer. Claim 25 requires a composition  
13 whose emission of formaldehyde is lower than from a molding composition for which the  
14 polyacetal copolymer was prepared using a Lewis acid as initiator. None of the references teach  
15 reducing formaldehyde emissions. The Examiner has asserted that this is inherent and the  
16 applicant respectfully disagrees.

17           Claim 25 requires a that the initiator is trifluoromethanesulfonic acid and/or a derivative  
18 of trifluoromethanesulfonic acid. The Examiner has relied upon Mück for this feature.

19           In addition, this group of claims requires the specific colorant selected from the group  
20 consisting of white pigments, black pigments, and color pigments. As stated above, the  
21 Examiner has relied upon Chapman for this teaching but Chapman is not believed to be  
22 combinable because it is directed to a non-analogous art.

23           Again, the Examiner must consider the references as a whole, In re Yates, *supra*. The  
24 Examiner cannot selectively pick and choose from the disclosed multitude of parameters **without**



1 **any direction** as to the particular one selection of the reference **without proper motivation**.

2 The mere fact that the prior art may be modified to reflect features of the claimed invention does

3 not make modification, and hence claimed invention, obvious **unless the prior art suggested**

4 **the desirability of such modification** (In re Gordon, supra); In re Baird, supra and In re Fritch,

5 supra). In re Gorman, supra) (in a determination under 35 U.S.C. § 103 it is impermissible to

6 simply engage in a hindsight reconstruction of the claimed invention; the references themselves

7 must provide some teaching whereby the applicant's combination would have been obvious); In

8 re Dow Chemical Co., supra) (under 35 U.S.C. § 103, both the suggestion and the expectation of

9 success must be founded in the prior art, not in the applicant's disclosure). The applicants

10 disagree with the Examiner why one skilled in the art with the knowledge of the references

11 would selectively modify the references in order to arrive at the applicants' claimed invention.

12 The Examiner's argument is clearly based on hindsight reconstruction.

13 Obviousness cannot be established by combining the teachings of the prior art to produce

14 the claimed invention absent some teaching, suggestion, or incentive supporting this

15 combination, although it may have been obvious to try various combinations of teachings of the

16 prior art references to achieve the applicant's claimed invention, such evidence does not establish

17 prima facie case of obviousness (In re Geiger, supra). There would be no reason for one skilled

18 in the art to Auerbach taken with Paul in view of Chapman and Mück.

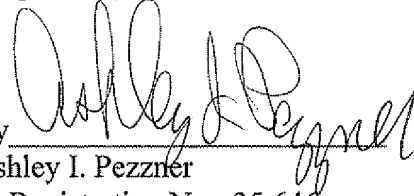
19 Claim 26 is dependent upon claim 25 and would be patentable for at least the

20 same reasons claim 25 is patentable.

1 **VIII. CLAIMS**

2 A copy of the claims involved in the present appeal is attached hereto as Appendix A. As  
3 indicated above, the claims in Appendix A do include the amendments filed by Applicant on  
4 May 30, 2006, and do not include the amendment(s) filed on November 7, 2006.

Respectfully submitted,

By 

Ashley I. Pezzner

Registration No.: 35,646

CONNOLLY BOVE LODGE & HUTZ LLP

1007 North Orange Street

P.O. Box 2207

Wilmington, Delaware 19899

(302) 658-9141

(302) 658-5614 (Fax)

Attorney for Applicant

**APPENDIX A**

**Claims Involved in the Appeal of Application Serial No. 10/069,087**

1. A colored molding composition which comprises a polyacetal copolymer, wherein the polyacetal copolymer consisting essentially of oxymethylene units and oxyethylene units, and strong protonic acid and/or a derivative of a strong protonic acid was used as initiator during preparation of the polyacetal copolymer, and a colorant, and the emission of formaldehyde from the colored molding composition is lower than from a molding composition for which the polyacetal copolymer was prepared using a Lewis acid as initiator and wherein the formaldehyde emission, determined on test specimens in accordance with the German Automotive Industry Recommendation No. 275 (VDA 275), is not more than 20 mg/kg.
2. The molding composition as claimed in claim 1, which comprises from 0.1 to 3.0% by weight of colorants selected from the group consisting of white pigments, black pigments, and color pigments.
3. The molding composition as claimed in claim 2, wherein the colorants carry a coating of an alkali metal salt of a fatty acid having at least 12 carbon atoms.
11. The molding composition as claimed in claim 1, wherein the polyacetal copolymer comprises from 0.1 to 10 mol% of oxyethylene units.
12. The molding composition as claimed in claim 1, wherein the formaldehyde emission, determined on test specimens in accordance with the German Automotive Industry Recommendation No. 275 (VDA 275), is not more than 60% of the formaldehyde emission of a colored molding composition for which the polyacetal copolymer was prepared using  $\text{BF}_3$  as the initiator.
14. The molding composition as claimed in claim 1, which further comprises from 0.1 to 10% by weight of stabilizers and auxiliaries.

- 1 15. A process to prepare a molding composition which comprises preparing a polyacetal  
2 copolymer which consisting essentially of oxymethylene units and oxyethylene units,  
3 using trifluoromethanesulfonic acid and/or a derivative of trifluoromethanesulfonic acid  
4 as an initiator, mixing the polyacetal copolymer with at least one colorant selected from  
5 the group consisting of white pigments, black pigments and color pigments, and  
6 obtaining a colored polyacetal molding composition whose emission of formaldehyde is  
7 lower than from a molding composition for which the polyacetal copolymer was prepared  
8 using a Lewis acid as an initiator and wherein the formaldehyde emission, determined on  
9 test specimens in accordance with the German Automotive Industry Recommendation  
10 No. 275 (VDA 275), is not more than 20 mg/kg.
- 11 16. The process as claimed in claim 15, wherein said colorant is in an amount from 0.1 to  
12 3.0% by weight.
- 13 17. The process as claimed in claim 16, wherein the colorant carries a coating of an alkali  
14 metal salt of a fatty acid having at least 12 carbon atoms.
- 15 18. The process as claimed in claim 15, wherein the polyacetal copolymer comprises from  
16 0.1 to 10 mol% of oxyethylene units.
- 17 19. The process as claimed in claim 15, wherein the formaldehyde emission, determined on  
18 test specimens in accordance with the German Automotive Industry Recommendation  
19 No. 275 (VDA 275), is not more than 60% of the formaldehyde emission of a colored  
20 molding composition for which the polyacetal copolymer was prepared using  $\text{BF}_3$  as  
21 initiator.
- 22 21. The process as claimed in claim 15, which further comprises from 0.1 to 10% by weight  
23 of stabilizers and auxiliaries.
- 24 22. The process as claimed in claim 16, wherein the polyacetal copolymer comprises from  
25 1.0 to 2.5 mol% of oxyethylene units.
- 26 23. The process as claimed in claim 15, wherein the formaldehyde emission, determined on  
27 test specimens in accordance with the German Automotive Industry Recommendation

1 No. 275 (VDA 275), is not more than 50% of the formaldehyde emission of a colored  
2 molding composition for which the polyacetal copolymer was prepared using  $\text{BF}_3$  as the  
3 initiator.

4 24. The process as claimed in claim 16, wherein the formaldehyde emission, determined on  
5 test specimens in accordance with the German Automotive Industry Recommendation  
6 No. 275 (VDA 275), is less than 10 mg/kg.

7 25. A process for reducing the formaldehyde emission of colored molding compositions  
8 made from polyacetal copolymer, which comprises preparing a polyacetal copolymer  
9 consisting essentially of oxymethylene units and oxyethylene units, using  
10 trifluoromethanesulfonic acid and/or a derivative of trifluoromethanesulfonic acid as an  
11 initiator, mixing the polyacetal copolymer with at least one colorant selected from the  
12 group consisting of white pigments, black pigments and color pigments, and obtaining a  
13 colored polyacetal molding composition whose emission of formaldehyde is lower than  
14 from a molding composition for which the polyacetal copolymer was prepared using a  
15 Lewis acid as initiator.

16 26. The process as claimed in claim 25, wherein when the initiator is added in a solvent.

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**APPENDIX B**

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

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**APPENDIX C**

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No related proceedings are referenced in II. above, hence copies of decisions in related

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proceedings are not provided.